BEFORE THE SHORELINES HEARINGS BOARD
STATE OF WASHINGTON

PUGET SOUND WATER QUALITY DEFENSE FUND, FRIENDS OF DISCOVERY PARK, THE WASHINGTON ENVIRONMENTAL COUNCIL and LEGAL ADVOCATES OF WASHINGTON, INC. Appellants, v. MUNICIPALITY OF METROPOLITAN SEATTLE (METRO), CITY OF SEATTLE, and State of Washington DEPARTMENT OF ECOLOGY, Respondents.	SHB Nos. 88-57 &60 ORDER DENYING EXCEPTIONS

On August 25, 1989, the Board entered its decision in the above matter. Upon motion of the appellants and by Order of September 14, 1989, the same was pronounced to be proposed decision.

The following were then filed by the parties:

1. Appellant's Exceptions to Proposed Findings and Conclusions for Affirmance, filed October 10, 1989.

2. Respondent's Reply to Appellant's Statement of Exceptions filed October 19, 1989.

3. Reply of Citizens to Save Interbay to Appellants' Exceptions, filed October 19, 1989.

In addition to the foregoing the parties also filed:

4. Respondents' Statement of Exceptions filed October 5, 1989.

5. Exceptions by Intervenor Citizens to Save Interbay to Proposed Final Order of the Shoreline Hearing Board, filed October 5, 1989.

6. Appellant's Objections and Reply to Exceptions Filed by Respondents Metro, Seattle and CSI.

Wherefore, the Board, having considered these and being fully advised, concludes as follows:

1. The Board's rules of procedure, at WAC 461-08-225(1) provide:

> "Within twenty days . . . from the date of receipt of the proposed decision and order to the parties . . . any party aggrieved thereby may file with the board, a written statement of exceptions. . . . (emphasis added.)

The proposed decision would affirm the City's grant of the permit in this case. Respondents are not parties aggrieved thereby. Their exceptions and related documents (enumerated as items 4, 5 and 6 above) are inconsistent with WAC 461-08-225(1), and no procedure exists for consideration of these documents.

2. The Board, divided in the proposed decision, remains similarly divided after consideration of appellants' exceptions and replies thereto (enumerated as items 1, 2 and 3 above.) A division exists over whether to grant appellants' exceptions, with no majority in favor. Under WAC 461-08-235, where a majority of the Board cannot agree after considering exceptions, the decision of local government shall prevail. The Board therefore concurs that, by operation of law, the exceptions are denied and the proposed decision, which has the effect of affirming Seattle, is adopted as final.

ORDER

The Exceptions are DENIED. The Proposed Order is adopted as Final.

DONE this 3rd day of November, 1989.

SHORELINES HEARINGS BOARD

JUDITH A. BENDOR, Chair

WICK DUFFORD, Member

HAROLD S. ZIMMERMAN, Member

NANCY BURNETT, Member

THOMAS R. COWAN, Member

LYLE J. WATSON, Member

WILLIAM A. HARRISON
Administrative Appeals Judge

FINAL DECISION

SHORELINES HEARINGS BOARD

SHB Nos. 88-57 and 88-60

PUGET SOUND WATER QUALITY DEFENSE FUND,
FRIENDS OF DISCOVERY PARK, WASHINGTON ENVIRONMENTAL COUNCIL,
and LEGAL ADVOCATES OF WASHINGTON, INC.,

Appellants,

v.

MUNICIPALITY OF METROPOLITAN SEATTLE (METRO),
CITY OF SEATTLE, and
STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY,

Respondents,

and

CITIZENS TO SAVE INTERBAY,

Intervenors.

Issued
August 25, 1989

TRANSMITTAL OPINION

Following is the decision of the Washington State Shorelines Hearings Board in this matter.

Three members have concurred for affirmance of the shoreline permit. Three members have concurred for reversal of the shoreline permit.

The effect of this decision is to affirm the City's grant of the permit. This is a FINAL decision for purposes of appeal pursuant to WAC 461-08-240. Department of Ecology v. Kirkland, 84 Wn.2d 25, 523 P.2d 1181 (1974).

Because four members did not agree, this decision shall not serve as precedent.

William A. Harrison

WILLIAM A. HARRISON
Administrative Appeals Judge

FINAL FINDINGS OF FACT,
CONCLUSIONS OF LAW
AND ORDER

- AFFIRMANCE -

BEFORE THE SHORELINES HEARINGS BOARD
STATE OF WASHINGTON

PUGET SOUND WATER QUALITY DEFENSE FUND, FRIENDS OF DISCOVERY PARK, and THE WASHINGTON ENVIRONMENTAL COUNCIL, and LEGAL ADVOCATES OF WASHINGTON, INC., Appellants, v. MUNICIPALITY OF METROPOLITAN SEATTLE (METRO), CITY OF SEATTLE, and STATE WASHINGTON, DEPARTMENT OF ECOLOGY, Respondents. and CITIZENS TO SAVE INTERBAY, Intervenor.	SHB Nos. 88-57 and 88-60 FINAL FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER - AFFIRMANCE

This matter is the appeal of a plan shoreline permit granted by the City of Seattle to Metro for expansion of the sewage treatment plant at West Point.

The matter came on before the Shorelines Hearings Board, William A. Harrison, Administrative Appeals Judge, presiding. Sitting as the Board were; Wick Dufford, Chairman, Judith A. Bendor, Harold S. Zimmerman, Nancy Burnett, Thomas R. Cowan and Lyle Watson, Members.

Appellants Puget Sound Water Quality Defense Fund and Friends of Discovery Park appeared by Michael W. Gendler and David A. Bricklin, Attorneys at Law. Appellant Washington Environmental Council appeared by Robert E. Mack, Attorney at Law. Appellant Legal Advocates for Washington, Inc. appeared by Robert E. Johns, Attorney at Law.

Respondent Municipality of Metropolitan Seattle (Metro) appeared by Robert D. Mitchell and Thomas Eli Backer, Attorneys at Law. Respondent City of Seattle appeared by Judith E. Barbour, Assistant City Attorney.

Intervenor Citizens to Save Interbay appeared by Richard A. DuBey, Attorney at Law.

The hearing was conducted at Seattle and Olympia, Washington, on May 22 through June 16, 1989. Gene Barker & Associates provided court reporting services.

Witnesses were sworn and testified. Exhibits were examined. The Board viewed the site of the proposal and the alternatives in the company of Judge Harrison and the parties. Closing arguments of counsel were presented on June 19, 1989. Closing briefs were filed on June 28, 1989. From testimony heard and exhibits examined, the Shorelines Hearings Board makes these

FINDINGS OF FACT

I

This matter arises on the shores of Puget Sound at West Point in

Seattle, and concerns a proposal to expand a sewage treatment plant located there.

II

The sewage treatment plant at West Point is owned and operated by the Municipality of Metropolitan Seattle ("Metro") which provides sewage treatment and related services to the greater Seattle area. Metro operates five wastewater treatment plants in the Seattle area: Renton, Alki, West Point, Carkeek, and Richmond Beach. All but the Renton plant currently provides only primary sewage treatment.

III

Primary sewage treatment is the first stage of wastewater treatment and includes settling, screening and disinfection of wastewater. Primary treatment removes about 60 percent of the suspended solids from the wastewater. Secondary sewage treatment is biological treatment of the wastewater after the primary treatment. Secondary treatment uses bacteria to consume organic wastes. Secondary treatment removes about 85-90 percent of the suspended solids from wastewater.

IV

The Federal Water Pollution Control Act requires that secondary treatment be provided at municipal wastewater plants. The date for compliance was July, 1977. Between 1977 and 1984 Metro pursued a waiver from secondary requirements. In 1984, Metro determined to

proceed to secondary treatment. Shortly thereafter, the Washington State Department of Ecology commenced enforcement action culminating in a Consent Decree by the Superior Court for King County. That decree sets a compliance schedule calling for secondary treatment by December 31, 1995.

V

In the fall of 1984, Metro began an examination of regional sewage treatment with a view to determining the facilities needed for secondary treatment. Metro developed a 45-year planning period from 1985 to 2030. Secondary treatment is expected to be sufficient to address the major problems identified for sewage effluents discharged to marine waters during this time.

Metro conducted an extensive scoping process to identify alternative plants, including an initial array of more than 200 different alternatives. Because of the 45-year planning period, facilities were sized to handle wastewater flow at saturation population. That is the population in the Metro service area if development proceeds to the maximum densities allowed by current zoning regulations.

VI

The process of evaluating alternative configurations of treatment plants included public participation. City of Seattle staff and consultants also participated in the development and evaluation of alternatives.

VII

A final Facilities Plan and environmental impact statement (EIS) were published by Metro on November 7, 1985, culminating the evaluation process. The Plan identified four alternatives which were denominated "Cores". Cores 1, 2 and 3 are not pertinent here. However, Metro's preferred alternative, known as Core 4, was also set forth. Core 4 consists of upgrading primary treatment facilities to secondary treatment at West Point.

VIII

The Seattle Shoreline Master Program provides, pertinent to this matter, that:

> Expansion of existing sewage treatment plants or installation of new sewage treatment plants is prohibited in the Shoreline District unless no feasible alternative(s) to expansion or installation at such location exists. The determination as to feasibility shall be based upon [1] the goals and policies of Resolution 25173, as amended, [2] the Shoreline Management Act of 1971, as amended, and [3] full consideration of the environmental, social and economic impacts on the community. (SMC 24.60.610(A)) (brackets added for convenience of reference).

IX

The City of Seattle filed an administrative appeal of the EIS because it did not present alternatives that avoided siting treatment facilities in shoreline areas. The appeal was settled by Metro's agreement to prepare a Supplemental EIS evaluating three non-West Point alternatives, each of which was prescribed by the City. These

three alternatives were 1) a sewage treatment plant in the Duwamish area (known as "Large Duwamish " or "Core 5D"), 2) a sewage treatment plant in the Interbay area (known as "Large Interbay" or "Core 5I") and 3) a smaller plant in each of Interbay and the Duwamish (known as the "Split Alternative" or "Core 5S").

X

The key features for the West Point proposal and the three non-shoreline alternatives are as follows:

1. West Point proposal. The West Point plan is proposed to be upgraded to provide secondary treatment for flows of 139 million gallons per day ("mgd"). That capacity is projected to be adequate until the year 2026, at which time the plant capacity would be expanded to 165 mgd. Public access to West Point would be increased from existing conditions by development of new landscaping and pedestrian trails. The North beach would also be restored to a more natural condition. Wolf Bauer, one of the world's authorities on beaches and shorelines, pointed out that both the original North and South beaches at West Point were "accretion" beaches with backshore available for walking and public access. His plan of adding gravel to the South beach caused the beach to build rather than erode. In his recommendations for utilizing the $30 million shoreline fund, he would encourage placing gravel on North beach, restoring that area much as Metro has already restored South beach. This will enhance the

public's enjoyment of scenic and maritime views from West Point through action by Metro. In contrast, the non-shoreline alternatives which might lead to abandonment of the West Point plant include no secure source of funding for similar landscaping, trails or beach improvement at West Point.

2. Large Duwamish Alternative. The large Duwamish alternative would meet the common objective of the non-West Point alternatives, namely, to allow abandonment of the West Point plant by constructing a new plant (or plants). Metro has not determined an exact site for this alternative. Rather, Metro and the City have agreed to a large "nodal" area in the Duwamish industrial area from which they have agreed to a "representative" site. The representative site extends north from S. Dawson Street along 1st Avenue S. in an industrial area. A 124 mgd plant would be built in the Duwamish area. In 2010 it would be expanded to 137 mgd and in 2023 to 165 mgd. A major, new pipeline and tunnel would be needed from the West Point collection system at Interbay under downtown Seattle to the Duwamish plant. The need for such a pipeline and tunnel arises from the fact that sewage would be routed southward to the Duwamish while it presently is routed northward to West Point. Present sewage trunk lines increase in diameter as sewage moves northward. Reversing the flow in existing sewers is therefore not practical, rather a new sewer increasing in diameter as sewage moves southward would be required. The treated

effluent from the Duwamish plant would be routed through another major new pipeline and tunnel under the Duwamish River and West Seattle for discharge south of Alki Point.

3. Large Interbay alternative. The large Interbay alternative also involves only a "representative" site. The representative site extends from W . Emerson Place southward along 15th Avenue W. to the edge of the former City dump. A 124 mgd plant would be built in the Interbay area. In 2010 it would be expanded to 144 mgd, and in 2026 to 165 mgd.

4. Split alternative. The split alternative would involve smaller plants at the sites just described for both Interbay and Duwamish. At Interbay a 73 mgd plant would be built and, in 2019, it would be expanded to 109 mgd. In the Duwamish area, a 56 mgd plant would be built. The sum of Interbay's 109 mgd and Duwamish's 56 mgd would be the 165 mgd needed. Although the Interbay plant would discharge its effluent at West Point, the Duwamish plant would discharge south of Alki Point via a major new pipeline and tunnel under the Duwamish River and West Seattle. The new major pipeline and tunnel under downtown Seattle would not be required for the Split Alternative as is the case for the large Duwamish alternative.

XI

On July 17, 1986, after consideration of the City's three non-shoreline alternatives, the Metro Council voted to adopt a resolution favoring the West Point proposal.

XII

On July 31, 1986, the City established a two phased procedure for Council review of proposed sewage treatment expansions. The first phase addresses the feasibility of non-shoreline alternatives and requires issuance of a "plan shoreline permit". The second phase requires Council approval of a "project-level permit" for construction of a plant at the location specified in the plan permit. This process was approved by the Department of Ecology as part of Seattle's shoreline master program.

XIII

On December 31, 1986, Metro submitted to the City its application for a plan shoreline permit for West Point.

XIV

Cost differences between the proposal at West Point and the non-shoreline alternatives can be compared in several ways. Metro and the City used two principal means of cost comparison in connection with the plan shoreline application. These are denominated "1988 Present Worth" and "1988 Dollars" respectively.

XV

The "1988 Present Worth" takes timing into account explicitly, discounting future costs to reflect the opportunity to invest current balances in the mean time. This means of cost comparison has two significant draw backs. First, in focusing only on the 1988 balance

that would be invested to accomplish long term construction, it greatly minimizes the true scale of expenditure over time. Second, the emphasis on timing portrays a cost advantage for construction which occurs later rather than sooner. Where, as here, time is of the essence in achieving secondary treatment, delay should not be portrayed as advantageous. For these reasons we find "1988 Present Worth" to be an inferior means of cost comparison.

XVI

The better means of cost comparisons is that denominated as "1988 Dollars". This represents the sum of costs independent of when they occur, with only the effect of inflation removed. The complete cost of the proposal and each of the City's non-shoreline alternatives expressed in 1988 dollars is:

West Point	$1.807 billion
Interbay (Core 5I)	2.045 billion
Duwamish (Core 5D)	2.036 billion
Split (Core 5S)	2.177 billion

Thus, over the planning period to the year 2030 and relative to the West Point proposal, the Interbay alternative would cost $238 million more; the Duwamish alternative would cost $229 more; and the Split alternative would cost $370 million more, all in 1988 dollars.

XVII

The costs set forth above are inclusive of costs to control "combined sewer overflow" (CSO). CSO occurs when rainfall causes the

capacity of combined sewers to be exceeded. Combined sewers collect both sanitary sewage and stormwater (rainfall). The result is a release of untreated sewage mixed with rainwater. The Department of Ecology regulates Metro's incidence of CSO separately from treatment regulation, though, both are forms of pollution control. Current Department of Ecology regulations require as a long term goal that CSO be ultimately reduced to one overflow per site per year. As applied to Metro, this has been construed by the Department to require 75% volume reduction in CSO over the next 20 years. Whether Metro will be required to reduce CSO further at the conclusion of 20 years is unknown at this time. No further CSO reduction is assumed in the costs set forth above, because there is no firm basis for such an assumption.

XVIII

The cost estimating methodology used by Metro for secondary facilities planning is similar to that used by Metro on other projects and by other public agencies constructing public works. The 30% contingency used in Metro's plan level cost estimates is realistic and appropriate.

XIX

Both the West Point proposal and the alternatives would cost less if sewer flow were reduced in volume by water conservation measures. Such conservation might be brought about by building code changes,

responses to increased water prices and voluntary conservation. Factors going against conservation include rising incomes, installation of water using appliances such as dishwashers and garbage disposals, and declining household size. Also, leaking sewer lines allow groundwater infiltration. Increased building may cause additional inflow from rain running off streets and roofs. On balance, conservation efforts are likely to be offset by other factors. The costs set forth above do not assume reduced costs because there is no firm basis for such an assumption.

XX

The estimated need in the King County area for public capital expenditures is $10 billion by the year 2000. Only $5 billion is estimated to be available. Pollution control projects comprise the largest part of the region's capital facilities needs. These projects include secondary sewage treatment, solid waste disposal, and maintenance and improvement of existing storm and sanitary sewers. Choosing a higher cost alternative to achieve secondary treatment will limit the regions' ability to pay for other pollution control facilities.

XXI

The impacts of the proposal and alternatives are as follows:

XXII

West Point Proposal. The West Point proposal by Metro would

have the following key impacts:

1. By way of background, West Point is a combination sand spit and fill area that juts west into Puget Sound from the Magnolia Bluffs in northwest Seattle. West Point is open to Puget sound on the north, west and south and connects on the east to Seattle's Discovery Park.

2. Approximately 16 acres are currently occupied by the Metro primary treatment plant now at West Point. Metro's proposal to upgrade its treatment facilities at West Point from primary to secondary treatment involves an expansion to 32 acres. This would preclude expansion of Discovery Park to include West Point in the foreseeable future.

3. Metro's proposal would increase the public access to West Point shoreline by up to 50% over public access now available. Carefully designed and vegetated berms of earth would shield the plant from the view of persons walking the shoreline of West Point. An artificial alteration of the north beach would restore much of its natural appearance as an element of the proposal. A successful restoration of the south beach has already been conducted by Metro.

4. The sewage outfall for the West Point proposal would be at West Point. This is north of Elliott Bay where currents favor northward transport of effluent out of Puget Sound.

5. West Point is open to winds on three sides are thus able to provide rapid dispersion of odors should any occur.

6. Residential areas from which a West Point plant can be seen are sufficiently far away that visual impacts are minor.

7. During the five years of plant construction, noise levels from the plant would range from 80 to 90 dBA which is considerably louder than at present. Construction truck trips would number 576 per day, peak, and 220 truck trips average over the same construction period. These can be compared to 6-8 sludge truck trips occuring presently. There would also be 20 bus trips per day and approximately 100 automobile trips per day by construction workers.

8. During the operation of the plant, after construction, the sludge truck trips would increase from 6-8 to approximately 22-26 per day. Noise levels of 78 to 87 dBA along the sludge traffic routes would result. The operation of a cooperative effort by Metro and a private firm will result in a lower level of sludge truck traffic after 1995.

9. The West Point proposal will not displace businesses, jobs or residences from the plant site.

10. Assuming that a sewer rate constitutes a hardship when paid from household income where the rate equals 1.75% or more of the income, the West Point proposal would place 66,601 households into hardship by 1995 in Seattle.

XXIII

Interbay and Split Alternatives.

1. By way of background, Interbay is a level lowland lying

between Magnolia and Queen Anne hills. The Interbay area is so called because it extends from the Salmon Bay Waterway on the north to Elliott Bay on the south.

2. The Burlington Northern Railway occupies a major portion of Interbay with its Balmer classification yard, roundhouse and car shop. Some 45-50 trains per day terminate or originate at these extensive Railway facilities.

3. Burlington Northern is presently unwilling to make more than 3-5 acres of its property available for sewage treatment facilities. Therefore, in the area north of Dravus Street proposed for consideration, there are only 19.4 acres of industrially zoned property plus the 3-5 non-contiguous acres of Burlington Northern, also zoned industrial, for development of a plant in an industrial zone. This is not sufficient for either the 109 mgd plant of the Split alternative or the 165 mgd plant of the Interbay alternative.

4. Commercially zoned property adjacent to the industrial zone just described now contains the community center of the Interbay area. Stores in this area, including a QFC grocery store, serve thousands of nearby residents. The Interbay Covenant Church serves as a community center. These buildings would be demolished if the commercial property were re-zoned to industrial and taken for the sewage treatment plant.

5. An Interbay or Split plant occupying the present site of the

National Guard Armory would depend on the availability of the site. The National Guard is presently unwilling to make that site available.

6. Interbay is in a valley between residential areas on Magnolia and Queen Anne. Although significant adverse air quality impacts are not expected at any of the locations considered, light, variable winds at Interbay reduce the potential for dispersion of any odor which might occur.

7. Construction at Interbay would be completed sooner than at West Point. While West Point would take 5 years, the Interbay alternative would take 4 years and the Split alternative 3 years. The resulting truck trips per day for construction at Interbay would exceed that for West Point.

8. A sewage treatment plant at Interbay would be near residences. Noise impacts during construction would be audible to many residences.

9. An Interbay plant would discharge effluent through the West Point outfall and thereby have the benefit of currents which favor northward transport of effluent out of Puget Sound.

10. A sewage treatment plant would displace up to 59 businesses and 780 employees.

11. Assuming that a sewer rate constitutes a hardship when paid from household income where the rate equals 1.75% or more the income, the Interbay alternative would place 6,446 households more than West

Point into hardship by 1995 in Seattle. The Split alternative would place 8,484 more households into hardship than West Point.

12. The additional cost of the large Interbay alternative versus the West Point proposal equates to an annual additional cost of $22 per year (average, in nominal dollars) for household customers over the 1988 to 2030 planning period. The same additional cost for the Split alternative (Core 5S) is $44 per year for household customers.

XXIV

Duwamish Alternative.

1. By way of background, the Duwamish area is in heavy industrial use as reflected in present traffic and development patterns.

2. The Duwamish site is near the Georgetown residential community. Georgetown is a relatively poor community that has been adversely impacted by rapid change and prior development.

3. An additional 16 miles of large diameter pipeline would be required for the Duwamish alternative relative to the West Point proposal.

4. The effluent transfer portion of new pipeline would disrupt Duwamish River sediments near Kellogg Island at the crossing there. These sediments are contaminated by prior industrial practices. If disrupted, the sediments would show potential for adverse impacts on migrating fish. The same potential would exist for birds which feed on fish.

5. A greater probability of southward pollutant transport is associated with outfalls south of Elliott Bay. The Duwamish outfall would be south of Elliott Bay.

6. No noise impacts are expected on residential areas from plant construction at the Duwamish site.

7. For the large Duwamish alternative, truck trips per day during construction would be greater than for the West Point proposal. For the smaller Duwamish plant of the Split alternative, truck trips during construction would be less than for West Point. Construction of the large Duwamish plant would, like West Point plant, take 5 years. The smaller Duwamish plant of the Split alternative would take 3 years.

8. A sewage treatment plant occupying the Duwamish site would displace up to 18 businesses and 517 employees.

9. Assuming that a sewer rate constitutes a hardship when paid from household income where the rate equals 1.75% or more of the income, the Duwamish alternative would place 11,602 households more than West Point into hardship by 1995 in Seattle.

10. The additional cost of the Duwamish alternative versus the West Point proposal equates to an annual additional cost of $40 per year (average, in nominal dollars) for household customers over the 1988 to 2030 planning period.

XXV

The City of Seattle's Department of Construction and Land Use

(DCLU) reviewed Metro's application for a planned shoreline permit. The DCLU concluded that the Interbay, Split and Duwamish non-shoreline alternatives were feasible. A recommendation of denial for the West Point proposal was contained in the DCLU report published in July, 1987.

XXVI

The City of Seattle's Hearing Examiner, following hearing, concluded the Interbay and Split alternatives were not feasible, but that the Duwamish alternative is feasible. The Hearing Examiner entered Findings of Fact, Conclusions of Law and Recommendation of denial for the West Point proposal on November 30, 1987.

XXVII

The Seattle City Council, following hearing, concluded that there is no feasible non-shoreline alternative to the West Point proposal. The Seattle City Council entered Findings of Fact, Conclusions of Law and Decision on October 24, 1988. The Decision granted the plan shoreline permit with 11 conditions, addressing plant footprint, public access, recreational opportunities, odor control, traffic, noise control, visual mitigation, habitat and hillside stability, potentially hazardous chemicals, a shoreline and park improvement fund of $30 million and implementation (See Appendix). The cost of this and the other permit conditions is offset by savings relating to reuse of facilities and CSO savings specific to the West Point proposal,

found since the DCLU review. Appellants filed their appeal before this Board from the granting of the plan shoreline permit by Seattle to Metro.

XXVIII

Any Conclusion of Law deemed to be a Finding of Fact is hereby adopted as such. From these Findings of Fact, the Board makes these

CONCLUSIONS OF LAW

I

We review the consistency of the proposed development with the Shoreline Management Act and the applicable shoreline master program. RCW 90.58.140.

II

The proposed development facilitates public access to the West Point Shoreline, is consistent with control of pollution and prevention of damage to the natural environment. The proposed development is a reasonable and appropriate use consistent with the Shoreline Management Act.

III

There are three issues regarding the consistency of this proposed development with the Seattle Shoreline Master Program: 1) Whether the City properly applied its phasing procedure in granting the shoreline approval?, 2) Whether the proposal minimizes the impact on the shoreline, both as to on-site mitigation and as to moving portions of

the sewage treatment plant off the shoreline, such as in Cores 1, 2 or 3?, and 2) Whether there is a feasible non-shoreline alternative to the West Point proposal? We now take these up in turn.

IV

Proper Application of Phasing.

Appellants contend that Seattle's two-phased shoreline permit process was wrongly applied. In particular they assert that insufficient detail was known about the proposal and the alternatives to determine feasibility at the plan permit stage. We disagree. Both the proposal and the non-shoreline alternatives were explored in a complete environmental impact statement and in adversary process during extensive quasi-judicial proceedings before both the City Hearing Examiner and, thereafter, the Seattle City Council. Seattle had sufficient detail concerning the proposal and the non-shoreline alternatives to apply its permit process at the plan level. Seattle applied its phasing procedure properly when it acted upon Metro's plan level shoreline application.

V

On Site Mitigation.

Mitigation of the impacts of the West Point proposal and non-shoreline alternatives is a subject which has been addressed sufficiently to make the feasibility determination which characterizes the plan level shoreline permit. However, the ultimate mitigation of

impacts for the site selected at the plan level is properly an issue for the next ("project") level shoreline permit. That level of mitigation, including removal of some but not all facilities from the shoreline, is not appropriate to the plan level determination of whether there is a feasible non-shoreline alternative.

VI

Whether there is a Feasible Non-Shoreline Alternative.

As we have previously found, the pertinent Seattle Shoreline Master Program provision states:

> Expansion of existing sewage treatment plants or installation of new sewage treatment plants is prohibited in the Shoreline District unless no feasible alternative(s) to expansion or installation at such location exists. The determination as to feasibility shall be based upon [1] the goals and policies of Resolution 25173, as amended, [2] the Shoreline Management Act of 1971, as amended, and [3] full consideration of the environmental, social and economic impacts on the community. (SMC 24.60.610(A)) (brackets added for convenience of reference, emphasis added).

VII

This provision does not prohibit sewage treatment plant expansion on the shoreline. To the contrary, such expansion is allowed when non-shoreline alternatives are not feasible. The feasibility determination must be made with regard to the Shoreline Management Act with which we have previously found the proposal to be consistent. For the same reasons we conclude that the proposal is consistent with City Resolution 25173.

VIII

There is insufficient industrially zoned property available in Interbay to accommodate the sewage treatment facilities required under either the Interbay or Split alternatives. The National Guard site is presently unavailable. Moreover, a sewage treatment plant in Interbay would have adverse noise and potential odor impacts on the surrounding residential neighborhoods, would result in displacement of businesses, would result in loss of employment, and would substantially eliminate the commercial and community center of the Interbay area. For these reasons, in addition to their unacceptably high costs, the Interbay and Split alternatives (including the National Guard version) are not feasible.

IX

The Duwamish alternative would require 16 additional miles of major conveyance systems which would be expensive, difficult and disruptive. The effluent conveyance would cross the Duwamish River, stirring up toxic sediments in the process and then discharge south of Alki Point where the probability of southward effluent transport is greater than at West Point. A Duwamish plant would displace businesses and result in job losses. The unacceptably high cost of this alternative would cause hardship to many ratepayers. For these reasons the Duwamish alternative is not feasible.

X

The West Point proposal will cause fewer adverse environmental, social and economic impacts than the non-shoreline alternatives. The West Point site is relatively isolated, has unique air and water dispersion advantages, and presents fewer unknowns than the alternatives. Metro's proposal will displace no homes or businesses, and cause no loss of business revenue because the site is already in Metro ownership. The proposal would also produce substantially less ratepayer hardship. Metro's proposal will substantially improve the experience of the West Point beach visitor over current conditions, and provides a reasonably balanced approach in meeting both the recreational and wastewater disposal needs of the metropolitan area. We conclude that the shoreline plan level permit must be evaluated with the conditions imposed by the Seattle City Council. See, San Juan County v. Department of Natural Resources, 28 Wn. App. 796 (1981). Having evaluated the permit as conditioned, we conclude that it is consistent with the SSMP.

XI

Secondary treatment of wastewater will improve water quality and benefit all Puget Sound shorelines. Use of the West Point site will hasten rather than delay that result by avoiding further potential dispute over site selection.

XII

Consideration of social and economic impact requires consideration of the capital needs of the region relative to available resources. The non-shoreline alternatives' higher cost would potentially preclude other important capital projects in the region thereby further contributing to their infeasibility.

XIII

After full consideration of the environmental, social and economic impacts on the community as provided in the SSMP, we conclude that there are no feasible non-shoreline alternatives to the West Point proposal.

XIV

Any Finding of Fact deemed to a Conclusion of Law is hereby adopted as such. From these Conclusions of Law, the Board enters this

ORDER

The plan shoreline permit granted by the City of Seattle to Metro for the West Point proposal is hereby affirmed.

DONE at Lacey, WA, this 25th day of August, 1989.

SHORELINES HEARINGS BOARD

Harold S. Zimmerman
HAROLD S. ZIMMERMAN, Member

Nancy Burnett
NANCY BURNETT, Member

Lyle J. Watson
LYLE J. WATSON, Member

WEST POINT

1. Plant Footprint and Future Development.

In order to minimize impacts related to the size of the plant facilities, Metro's above-ground facilities at West Point shall occupy no more than 32 acres, and no more than 6.1 acres of such facilities shall be located within the shoreline zone. Any parking areas located within the shoreline zone shall be covered with lots that are landscaped and designed to permit public access.

Metro's application for project-specific shoreline substantial development and master use permits shall evaluate alternative layouts that locate some or all solids handling facilities at a different, appropriately zoned and mitigated site. The maximum size of the plant facilities footprint, in and outside of the shoreline zone, shall be reduced to correspond to any changes in layout made to relocate solids handling facilities.*

This permit defines the maximum allowable footprint for all current and future wastewater treatment facilities at West Point. Metro shall record a declaration of covenants, conditions, and restrictions containing the limitations described in this condition. After construction, significant changes in the height and appearance of the plant will be prohibited unless they receive prior approval from the City.

Metro shall provide additional analysis of alternatives, including technological alternatives, to further reduce the footprint for possible use at the time of project level review. If an alternative technology is chosen, the maximum feasible footprint reduction from the use of that technology will be implemented as soon as possible.

---

* For example, if off-site dewatering (WPO-2) were adopted and implemented, the maximum footprint would be reduced to 30 acres.

2. Public Access.

Construction activities at West Point shall be organized and carried out in such a way as to avoid any closure of South Beach and to avoid any closure of the North Beach trail, except for temporary short-term closures such as those required to construct a saltwater intake line, construct an emergency outfall, or implement natural beach protection measures.

Metro shall provide a preliminary construction schedule as part of its project-specific permit application, indicating when beach closures are likely to occur. Metro shall provide updated construction schedules when it applies for construction permits, and at an appropriate later date prior to construction, Metro shall also inform the public and the Seattle Parks Department of any planned beach closures as part of Metro's public information program.

After first phase construction is complete, Metro shall permanently dedicate to the public for park and recreation purposes, through an easement or conveyance of development rights, non-shoreline and shoreline property that is not to be used for Metro's facilities within the footprint defined in Condition 1, including such portions of the perimeter berms and lids as may be consistent with public safety, security, and protection of landscaped plantings. In addition, Metro and the City shall negotiate a memorandum of understanding governing future management of this property.

3. Recreational Opportunities.

Metro shall work cooperatively with the Seattle Parks Department in designing its secondary treatment facilities at West Point to enhance public access and recreational opportunities. Metro shall also work cooperatively with the Seattle Parks Department to develop ways of supervising and carrying out construction activities that will result in improved recreational amenities within Discovery Park.

Metro shall create a South Beach/Lighthouse open space by relocation of the existing effluent pumping and dewatering buildings.

Metro shall evaluate in its design natural beach protection measures and improvements that enhance the public's recreational experience of North Beach, such as tidepools, sandspits, minipark, trails, and paths. Consistent with environmental review and authorization by other agencies with jurisdiction, the City would condition the project-level permit to require such measures and improvements. Funding for such measures and improvements would come from the Shoreline Improvement Fund.

4. Odor Control.

In consultation with the Puget Sound Air Pollution Control Agency, Metro shall design and install equipment to control potential emissions of odors and airborne pollutants from sewage handling and processing facilities at West Point. Odor control equipment shall be designed to reduce identifiable odors emanating from Metro's facilities at West Point (including Metro's manhole covers in Discovery Park) to a level of no more than five odor units as measured at any publicly accessible area outside the West Point plant boundary. Metro's project-level permit applications shall include analytical documentation of the odor control measures and technology that are planned to achieve compliance with this standard.

All loaded sludge trucks leaving West Point shall be covered with impermeable covers.

5. Traffic.

Metro's application for project-specific permits shall include Facilities Management and Transportation Plans for construction and operation that have as their goals minimizing traffic impacts caused by the West Point treatment facilities.

A. The construction transportation plan shall provide for the following mitigation measures:

1. Temporary measures to better separate pedestrians and vehicles and promote safety along the construction haul route leading from 15th Avenue West to the West Point site (e.g., traffic signals, crossing guards, pedestrian overpasses);

2. A non-shoreline location for any off-site construction staging area, approved by the City;

3. Busing construction workers to West Point from an off-site, non-shoreline location that has access to major arterials;

4. A construction schedule that limits construction traffic during rush hours, at night, and on weekends and holidays, consistent with the terms of the Seattle construction noise ordinance;

5. Identification and repair/reconstruction of streets adversely impacted by construction traffic, including assessment of pre-construction street improvements to minimize traffic noise; and

6. Provisions to ensure that construction traffic complies with posted speed limits in Discovery Park.

B. The operational transportation plan shall provide for the following mitigation measures:

1. Limitations on operational truck traffic at night and on weekends and holidays;

2. Provisions to ensure that operational traffic complies with posted speed limits in Discovery Park; and

3. Limitations on the volume of sludge truck traffic. The number of loaded sludge trucks leaving West Point shall not exceed 13 per day (yearly average).

C. The transportation plan shall also evaluate the following potential mitigation measures:

1. Barging of bulk materials;

2. Alternative truck routes; and

3. Measures to separate pedestrians and operational traffic within Discovery Park.

D. Metro shall locate its plant entry gate in an area that avoids adverse impacts on slope stability and hillside habitat and separates plant traffic from pedestrians using the beach.

6. Noise Control.

Metro shall require all contractors performing work at West Point to comply with the City's construction noise ordinance. Operational plant noise shall be consistent with the City's noise ordinance and shall not exceed 55 dB(A) as measured at any publicly accessible area outside the West Point plant boundary. Specific identifiable mechanical sounds from operation of fixed equipment will not exceed 52 dB(A) on the beaches.* Metro's project-level permit application shall include analytical documentation of the structural and operational noise control measures that are planned to achieve compliance with this standard.

---

* The beaches shall be defined as those areas below the ordinary high water mark.

7. Visual Mitigation.

Metro shall design its facilities to blend with the shoreline, park, and hillside environment at West Point. Taller structures, such as the effluent pumping station and new digesters, will be located near the retaining wall along the hillside.

Texture, facility placement, and color shall be used to minimize the visual impact of the West Point treatment facilities.

Metro shall provide a landscaped terrace extending from the hillside meadow over the administration building.

Metro shall provide a lattice lid over the roadway north of the West Point primary clarifiers.

No lidding for visual mitigation other than that described in this condition shall be required.

Metro shall provide an earthen berm with landscaping to screen the West Point treatment facilities from the view of those using the adjacent beaches and tide flats. The Seattle Parks Department will be consulted on all landscaping proposals.

Metro shall provide a broad and winding trail adjacent to the water, creating a diversity of foreshore and protected dryland vantage points and experiences.

Metro shall reduce the apparent size of the facility at the north end of the West Point site by providing landscaping on top of the aeration basins.

Metro shall provide improvements authorized by the Seattle Parks Department on the hillside above the plant to redirect views away from the West Point facilities.

Metro shall evaluate the impact of alternative plant lighting schemes upon nearby nocturnal wildlife and consult with the Coast Guard regarding the impact of glare upon navigation.

Metro's project-level permit application shall include computer-assisted design and photo analyses that demonstrate the effectiveness of the screening and landscaping measures required by this condition.

8. Habitat and Hillside Stability.

Adverse impacts to wildlife habitat areas, including beach, intertidal, and hillside/bluff areas, shall be mitigated during construction and operation at the West Point treatment facilities. As part of its application for project-specific permits, Metro shall describe the measures that will be utilized to mitigate adverse impacts upon habitat during construction.

In consultation with the Seattle Parks Department and relevant resource agencies, Metro shall do an inventory of existing habitat and evaluate the extent to which development of Metro's proposal and associated mitigation will result in a net improvement of or reduction in quality of habitat at the West Point site. Metro shall implement specific measures, consistent with sound environmental planning, to enhance existing and potential habitat areas and values at West Point, and shall maintain those measures on an ongoing basis. All enhancement projects shall be reviewed by the Seattle Parks Department and shall be completed within two years of the granting of the final occupancy permit.

The existing Discovery Park nature trail on the hillside above the plant shall not be physically disturbed during construction, except as approved by the Parks Department.

As part of its application for project-specific permits, Metro shall demonstrate that the planned retaining wall will stabilize the lower hillside east of the plant. Metro's application shall also evaluate potential methods of stabilizing the upper hillside east of the plant while preserving its current habitat. Hillside drainage patterns shall be monitored periodically during construction and operation.

In addition to demonstrating that the retaining wall will structurally stabilize the lower part of the hillside, Metro will address prospective visual impacts associated with the wall. Metro's application will identify which portions of the wall will be visually exposed from various vantage points, identify the quality of view anticipated from that exposure, and address specific techniques that will be utilized for color and texture treatment of the wall.

9. Potentially Hazardous Chemicals.

The risks associated with the use of potentially hazardous materials shall be minimized in accordance with all applicable regulations. Metro shall consult with the Seattle Fire Department regarding methods of storing, handling and transporting any potentially hazardous chemicals used at the West Point plant. Metro shall evaluate whether hypochlorite generated on-site, rather than chlorine transported to the plant, should be used as a disinfectant at West Point. Metro shall also document the risks, costs, and public health benefits of alternative potential disinfectants considered, including the use of ozone.

Prior to receiving final occupancy permit(s) for plant operation, Metro shall secure Seattle Fire Department approval of a hazardous materials handling program that describes how hazardous materials will be transported, used, and disposed of, including emergency procedures.

10. Shoreline, Park, and Community Improvements

A. Mitigation Fund

To mitigate the loss of potential shoreline recreation, access, and other unavoidable impacts at West Point, a shoreline and park improvement fund shall be established pursuant to Metro Council Resolution No. 4780 and shall be funded by Metro in the total amount of $30 million. Of this total, $25 million will be used solely within the City of Seattle and $5 million will be available for projects in the Metro service area.

The principal use of both the City and Metro funds will be to enhance public use of, access to, and access along bodies of water. The fund will be used for projects that compensate for the impact of the West Point plant by replacing, enhancing, or providing substitute resources or environments. Within this category of use, the first priority will be the acquisition, construction, expansion, and rehabilitation of salt water beaches, such as those at Carkeek Park, Golden Gardens, West Point, Myrtle Edwards Park, Alki, and Lincoln Park. Acquisitions and improvements that provide or increase public access to bodies of fresh water will also be eligible for funding. At least $2 million of the funds allocated to the City will be set aside as a permanent trust fund. Interest earned on the trust fund will be used to maintain beaches in their original or restored conditions.

The $25 million allocated to the City will also be used to compensate for the unavoidable impacts of plant construction on Discovery Park. The fund will be used to provide improvements and enhance park facilities. These improvements and enhancements will be identified by the Parks Department and could include a new visitor center, improved trails and roads, or enhanced entrances to the Park.

The $25 million City portion of the mitigation fund will be administered by the City of Seattle. The City will make final decisions about the choice of projects, budgets, and schedules. The City will provide Metro with an annual report describing the projects funded in the previous year. The $5 million regional portion of the fund will be administered by the Metro Council as it sees fit.

Metro shall make annual payments of $6 million each year for five years, with $5 million going to the City fund and $1 million to the regional fund. The first payment shall be made with the issuance of the project level shoreline permit.

B. Community Improvement Fund

To compensate for unavoidable impacts in communities affected by West Point and Alki construction, Metro shall provide $2 million to the City for improvements in these communities.

11. Implementation.

A. Public information program

Metro shall establish a public information program to facilitate exchange of information concerning construction plans and activities at West Point. This program shall include a citizens' advisory committee on West Point site design and mitigation.

B. City's satisfaction

All of the conditions of this permit must be met to the full satisfaction of the City, as demonstrated by the City Council's granting of required project-level permits. The project-level permit process includes a DCLU report and recommendation, Hearing Examiner review (public hearing, record and recommendation to City Council), and consideration by the City Council.

C. Processing costs

Metro shall reimburse the City for all costs incurred in reviewing Metro's application for project-level permits, including City staff time, consultant fees, and out-of-pocket costs. The City shall act expeditiously in reviewing Metro's application.

D. Substantial conformance

Metro's application for project-specific permits shall be organized to demonstrate substantial conformance with these plan-level permits, including satisfaction of each of the conditions described above.

FINAL FINDINGS OF FACT
AND
CONCLUSIONS OF LAW

- REVERSAL -

BEFORE THE SHORELINES HEARINGS BOARD
STATE OF WASHINGTON

PUGET SOUND WATER QUALITY DEFENSE FUND, FRIENDS OF DISCOVERY PARK, and THE WASHINGTON ENVIRONMENTAL COUNCIL, and LEGAL ADVOCATES OF WASHINGTON, INC., Appellants, v. MUNICIPALITY OF METROPOLITAN SEATTLE (METRO), CITY OF SEATTLE, and State of Washington DEPARTMENT OF ECOLOGY, Respondents. and CITIZENS TO SAVE INTERBAY, Intervenor.	SHB Nos. 88-57 and 88-60 FINAL FINDINGS OF FACT AND CONCLUSIONS OF LAW - REVERSAL

This matter is the appeal of a Plan Shoreline Permit granted by the City of Seattle to Metro for expansion of the sewage treatment plant at West Point.

The matter came on before the Shorelines Hearings Board, William A. Harrison, Administrative Appeals Judge, presiding. Sitting for the Board were Members: Wick Dufford, Chairman, Judith A. Bendor, Harold S. Zimmerman, Nancy Burnett, Thomas R. Cowan, and Lyle T. Watson.

Appellants Puget Sound Water Quality Defense Fund and Friends of Discovery Park appeared by Michael W. Gendler and David A. Bricklin, Attorneys at Law. Appellant Washington Environmental Council appeared by Robert E. Mack, Attorney at Law. Appellant Legal Advocates for Washington, Inc. appeared by Robert E. Johns, Attorney at Law.

Respondent Municipality of Metropolitan Seattle (Metro) appeared by Robert D. Mitchell and Thomas Eli Backer, Attorneys at Law. Respondent City of Seattle appeared by Judith B. Barbour, Assistant City Attorney.

Intervenor Citizens to Save Interbay appeared by Richard A. DuBey, Attorney at Law.

The hearing was conducted in Seattle and Lacey, Washington, on May 22 through June 16, 1989. Gene Barker & Associates provided court reporting services.

Witnesses were sworn and testified. Exhibits were examined. The Board viewed the sites of the proposal and the alternatives in the company of Judge Harrison and the parties. Closing arguments of counsel were presented on June 19, 1989. Closing briefs were filed on June 28, 1989. From the testimony heard, depositions and exhibits admitted and examined, the Shorelines Hearings Board makes these

FINDINGS OF FACT

I

This matter arises on the shores of Puget Sound in Seattle,

Washington. The Municipality of Metropolitan Seattle (Metro) proposes to build a 165 million gallon per day (mgd) secondary treatment wastewater plant on the shoreline at West Point. This plant is designed to serve the regional population anticipated through the year 2030.

II

West Point is a low lying promontory of land jutting into the waters of the Sound. It is 4 1/2 miles from Seattle's downtown. Seattle is the state's most populous city which is surrounded by rapidly growing urban and suburban areas. West Point in its natural state was a sandy accretion shore form, supporting a saltmarsh wetland. West Point has been described as the "premier beach on the Puget Sound."

Vistas from West Point are spectacular, ranging from Mt. Baker and the Whidbey Island cliffs on the north, sweeping to the Olympic mountains across the Sound, to Vashon Island and Mt. Rainier on the south. To the southeast rise a wooded hillside and the bluffs of Discovery Park. A vast panorama of water activity can be seen from West Point, encompassing commercial freighters, tugboats, Navy ships, ferries, sailboats, tall ships and motor boats. In season, migratory saltwater birds can be seen in abundance off West Point's shores. Bald eagles have an active nest on the hill above the Point (one of only two active eagle nests in all of Seattle). Barred owls and

woodland animals inhabitat the hillside.

III

Seattle's Discovery Park surrounds West Point. This park is a 532 acre area whose location, size, varied terrain and habitat, and relatively undeveloped features provide an unparalleled opportunity for the enjoyment of a natural area in the center of a large urbanized region.

The Park's role is aptly described in the current Discovery Park Master Plan:

> To provide an open space of quiet and tranquility for the citizens of this city -- a sanctuary where they might escape the turmoil of the city and enjoy the rejuvenation which quiet and solitude and intimate contact which nature can bring.

The Park's varied terrain starts on the eastern side bordering the Seattle Magnolia residential area. People leave their cars to walk or bicycle on trails and roadways through meadows to the high bluffs overlooking the Sound. A road and trails lead them down a steep hill, with views of the mountains and water, to West Point with its beaches.

In sum, West Point is the key to water and beach access for Discovery Park visitors.

IV

In the midst of West Point the existing primary wastewater treatment plant is an anomaly. This industrial facility currently occupies 16 acres of the Point.

V

In the early years of the present century, Seattle conveyed West Point and several hundred upland acres to the United States for national defense. These lands became Fort Lawton, a U.S. Army post.

In the same early years of this century, Seattle began planning its first sewer system. This resulted in the selection of West Point as the site for discharging city sanitary waste and stormwater into Puget Sound. These wastes were transported under Fort Lawton via a 12 foot diameter, brick arch tunnel completed in 1911. The tunnel is still in use today.

From 1911 to 1966, raw sewage was discharged to Puget Sound at West Point. In 1966, the recently formed Metro completed a primary sewage treatment plant on West Point to receive wastes from the Fort Lawton tunnel. West Point was deeded by the Army to Metro in connection with this development.

Some five years later, in 1971, this state enacted its Shoreline Management Act. At about the same time, in 1972, Fort Lawton became surplus to the needs of the national defense. Completing a cycle which began years earlier, the United State re-conveyed nearly all the remaining grounds of Fort Lawton to the City of Seattle and Discovery Park was created.

VI

The City, aware of the conflict of the existing treatment plant

on the beach land surrounded by Discovery Park, passed its Shoreline Master Program stating:

> Expansion of existing sewage treatment plants or installation of new sewage treatment plants is prohibited in the Shoreline District unless no feasible alternative(s) to expansion or installation at such location exists. The determination as to feasibility shall be based upon [1] the goals and policies of Resolution 25173, as amended, [2] the Shoreline Management Act of 1971, as amended, and [3] full consideration of the environmental, social and economic impacts on the community. (SMP, as codified in the City's Code at SMC 24.60.610(A); emphasis added. Brackets added for convenience of reference.)

VII

This Master Program provision was approved by the Washington Department of Ecology ("DOE") for promulgation as a state regulation in 1976. Ecology Director John A. Biggs stated in the Department's final letter approving the Master Program:

> West Point Sewage Plant - approved as originally submitted, however, we strongly urge that as a need for expansion develops, consideration should be given to the choice of another site not shoreline related. We reiterate that such facilities are not considered to be an accepatble use of the shorelines of the state.

VIII

A few years earlier, in 1972 Congress enacted the Federal Water Pollution Control Act, requiring municipalities to have their sewage receive "secondary" treatment by 1977.

Secondary treatment removes from the sewage 90% of the biological

oxygen demand (BOD), 90% of the suspended solids, and a substantial proportion of heavy metals and toxic organics. In comparison, primary treatment only removes 35% of the BOD, 60% of the suspended solids, and half as much of the heavy metals and toxic organics. The West Point primary plant performs somewhat better, removing about 45% of the BOD.

Secondary treatment will substantially improve the quality of the effluent being discharged into Puget Sound.

IX

Metro did not meet the 1977 deadline for secondary treatment. Until 1984 it attempted to obtain a waiver from the secondary treatment requirements, contending that control of combined sewer overflows (CSO) was more important.

The West Point plant remains a primary treatment at this time. Metro is currently under a court decree setting a secondary treatment compliance deadline of December 31, 1995.

X

After its waiver was denied by the U.S. Environmental Protection Agency (EPA), DOE instructed Metro to prepare a regional Facilities Plan for attaining secondary treatment needs. Metro used a 45 year planning period from 1985 to the year 2030. Metro issued the Plan and an Environmental Impact Statement (EIS) in November 1985. The Plan identified four alternatives: "Cores" 1, 2, 3 and 4, all of which

included a West Point shoreline plant. Metro's preferred alternative, Core 4, involved an all-West Point plant. Metro did not provide any non-shoreline alternative.

XI

In response, the City of Seattle filed an administrative appeal of the Metro EIS. The appeal was settled by Metro's agreeing to prepare a Supplemental EIS evaluating three non-West Point (non-shoreline) alternatives, known as the "Core 5" alternatives. These were: 1) a sewage treatment plant in the Duwamish area (known as "Large Duwamish" or "Core 5D"), 2) a sewage treatment plant in the Interbay area (known as "Large Interbay" or "Core 5I"), and 3) a combination of two smaller plants at Duwamish and Interbay (known as the "Split Alternative" or "Core 5S").

XII

The West Point proposal and the three non-shoreline alternatives all provide 165 mgd of secondary treatment with outfalls discharging into Puget Sound. The key features are as follows:

1. West Point Proposal (CORE 4). The West Point plant is to be upgraded to provide secondary treatment for initially 139 mgd flows. That capacity is projected to be adequate until the year 2026, at which time the plant capacity would be expanded to 165 mgd. This facility would occupy 32 acres. In common with each of the non-shoreline alternatives, the Renton sewage treatment plant would be

expanded and the Alki 6 mgd flow would be diverted to be treated elsewhere.

2. Large Duwamish Alternative (CORE 5D). The large Duwamish alternative would permit the entire West Point treatment plant to be abandoned. A new plant would be built in the Duwamish area. Metro has not determined an exact site for this alternative. Rather, in the context of this plan permit, Metro and the City have agreed to a large "nodal" area in the Duwamish industrial area, within which is an agreed-upon "representative" site. The representative site extends north from S. Dawson Street along 1st Avenue S.

A 124 mgd plant would be initially built. In 2010 it would be expanded to 137 mgd, and in 2023 to 165 mgd. A major new pipeline and tunnel would be built from the West Point collection system at Interbay under downtown Seattle to the plant. The treated wastewater (effluent) would be sent through another major new pipeline and tunnel under the Duwamish River and West Seattle, for discharge through a new outfall into Puget Sound south of Alki Point.

3. Large Interbay Alternative (CORE 5I). As the City and Metro agreed upon, the large Interbay alternative also involves only a "representative" site. This representative site extends from W . Emerson Place southward along 15th Avenue W. to the edge of the former City dump. A 124 mgd plant would be initially built, expanded to 144 mgd in 2010, and to 165 mgd in 2026 .

4. Split Alternative (CORE 5S). The Split Alternative would involve smaller plants at Duwamish and Interbay sites. A 56 mgd plant would be built in the Duwamish. At Interbay a 73 mgd plant would be initially built, and expanded to 109 mgd in 2019. In this alternative, the Interbay plant would discharge its effluent through the existing West Point outfall. The Duwamish plant would discharge south of Alki Point via a new pipeline and tunnel under the Duwamish River and West Seattle. There would not be a new major pipeline and tunnel under downtown Seattle in the Split Alternative.

XIII

On July 10, 1986 the Metro Water Quality Committee voted in favor of the Core 5D (Duwmamish alternative). Later in July the Metro Council voted by 18 to 17 to substitute the West Point proposal.

XIV

On July 31, 1986, the City established a two-phased procedure for City Council review of proposed sewage treatment expansions. This process was approved by the Department of Ecology.

The first phase determines the feasibility of non-shoreline alternatives. If a shoreline alternative is approved, a "Plan Shoreline Permit" is issued. This is the permit currently at issue in these appeals.

The second phase requires the Council to approve or deny a "Project-Level Permit", for construction of a plant at the shoreline location specified in the Plan Permit.

On December 31, 1986, Metro submitted its application to the City for a Plan Shoreline Permit for West Point.

XV

The City of Seattle's Department of Construction and Land Use (DCLU) reviewed Metro's Application. The DCLU concluded that the Duwamish (5D), Interbay (5I), and Split (5S) non-shoreline alternatives were all feasible. DCLU recommended denial of West Point in its report published in July, 1987.

XVI

The City of Seattle's Hearing Examiner held hearings and concluded that the Duwamish alternative was feasible, and that the Interbay and Split Alternatives were not feasible. He entered Findings of Fact, Conclusions of Law and Recommended Denial of the West Point proposal on November 30, 1987.

XVII

The Seattle City Council, following hearings, concluded (6-3) that there was no feasible non-shoreline alternative to the West Point proposal. On October 24, 1988, the Seattle City Council entered Findings of Fact, Conclusions of Law and Decision granting Metro a Plan Shoreline Permit with 11 conditions. Appellants filed their appeals of this Decision which became our SHB Nos. 88-57 and 88-60.

XVIII

We begin our analysis of the Shoreline Master Program feasibility test with economics.

Costs for the West Point proposal and the non-shoreline alternatives can be stated in several ways. Metro and the City used two principal means of analyzing costs in connection with the Plan Shoreline application. These are denominated "1988 Dollars" and "1988 Present Worth" respectively.

XIX

The "1988 Present Worth" takes timing into account explicitly. It discounts future costs by investment rates, to reflect the opportunity to invest current funds pending expenditure. This means of delineating costs has two significant draw-backs. First, investment rates are usually higher than inflation. Therefore, this method of calculation tends to understate the actual future expenditures over time by discounting future costs using this higher investment rate.

Secondly, under this approach a cost advantage occurs when construction occurs later rather than sooner. Where, as here, achieving secondary treatment sooner is a benefit, delay should not be calculated as an advantage.

For these reasons we find "1988 Present Worth" to be a less favored means of estimating costs.

XX

The better method of stating costs is that denominated as "1988 Dollars". This represents the sum of costs independent of when they

occur with the effect of future inflation removed. The complete cost of the proposal and each of the City's non-shoreline alternatives expressed in 1988 Dollars is:

West Point	$1.807 billion
Duwamish (Core 5D)	2.036 billion
Interbay (Core 5I)	2.045 billion
Split (Core 5S)	2.177 billion

Thus, over the 40-year planning period to the year 2030, and relative to the West Point proposal, the Duwamish Alternative would cost $229 million (13%) more; the Interbay Alternative would cost $238 million (13%) more; and the Split Alternative would cost $370 million (20%) more.

The vast majority of costs for West Point and the three alternatives is to implement secondary treatment and to control CSO. The added costs relative to location represent a relatively small portion of the overall cost.

XXI

The above costs include the costs to control "combined sewer overflow" (CSO). CSO occurs when rainfall causes combined sewers' capacity to be exceeded. Combined sewers exist in the Metro area. These sewers collect both sanitary sewage and stormwater runoff. Because of the overload, raw sewage mixed with the runoff is released without treatment into the near-shore environment of Puget Sound, Lake Union and other receiving waters.

The Department of Ecology regulates Metro's CSO discharges separately from wastewater plants discharges. Controls of both types of discharges is pollution control. Current Department of Ecology regulations require that CSO be ultimately reduced to one overflow event per pipe overflow point per year. This computes to a greater than 99% reduction in CSO volume. The Department has construed this to require Metro over the next 20 years to reduce CSO volume by 75%. No further CSO reduction is assumed in the above costs.

The Duwamish Alternative provides a greater degree of CSO control sooner than does the West Point proposal.

XXII

The cost estimating methodology used by Metro for secondary facilities planning is similar to that used by Metro on other projects and is consistent with industry standards. The 30% contingency used in Metro's Shoreline Plan Permit cost estimates is appropriate.

XXIII

Both the West Point proposal and the Core 5 Alternatives would cost less if flows into the plants were reduced in volume by water conservation. Conservation might be brought about by building code changes, responses to increased water prices and voluntary conservation. Factors working against consumption reduction include rising incomes, installation of water using appliances such as dishwashers and garbage disposals, and declining household size.

Also, leaking sewer lines allow groundwater infiltration. Increased building may cause additional inflow from rain running off streets and roofs.

The above Plan Level costs do not assume reduced flows resulting from conservation, because there is insufficient basis at this time to make such an assumption.

XXIV

Sewer rates (like other utility rates and sales taxes) are regressive. That is, a poor household will pay a higher percentage of its income for this service than would a middle class or wealthy household. Mindful of this, Seattle has adopted a rate relief program, to mitigate some of this impact. This option is available to other cities within the Metro area. All of the proposals may require some form of rate relief.

Due to recent state legislation, Metro will be able to shift some of the capital costs to new service areas through connection fees. These new areas are more likely to have a higher proportion of middle to upper income households than does Seattle.

XXV

The U.S. Environmental Protection Agency (EPA) has developed a scale of sewer charges as a percentage of median service area income. For Seattle, the EPA criterion suggests that sewer rates would cause economic hardship if they were greater than 1.75% of the city's median

income. By this standard, sewer rates as a percentage of income range from 0.51% for the West Point proposal to 0.57% for the Split Alternative. These are less than one-third of the EPA hardship standard. This standard contemplates that when sewer rates comprise 1.75% of the area's median income, those with lowest household income will suffer most. But the 1.75% standard is designed for application to an entire service area median income, not the lowest household incomes in the service area. These households are the proper subject of rate relief programs likely necessary under any circumstances. Neither the proposal nor the non-shoreline alternatives pose the prospect of significant economic hardship.

XXVI

Rates

The monthly household sewer rate in 1988 dollars (weighted average) over the planning period would be $9.41 for the West Point proposal. On the same basis, the monthly household sewer rate for the large Duwamish Alternative would be $10.34 per month, (93¢ more than for the West Point proposal), $9.98 for the large Interbay Alternative (57¢ more than West Point), and $10.53 for the Split Alternative ($1.12 more than West Point). The sewer rate costs cited above are free of inflation estimates for future years.

In contrast, sewer rates including inflation estimates for future years are known as "nominal rates". These can also be used to compare

the proposal with the non-shoreline alternatives. Metro produced a nominal rate projection for DCLU, the Hearing Examiner and the City Council. (Exhibit A-49, pp. 5D-23 to 25 and at Appendix p. APP5-87.) Subsequently, in 1989 the Metro rate model was revised to include a lower inflation factor. The result was a new set of nominal rates in which all three non-shoreline alternatives were, after the year 2003, less than the nominal rate for West Point as earlier presented to the City.

XVII

The main non-economic impacts of the proposal and alternatives are as follows:

West Point Proposal Impacts (4)

1. The existing anomaly of a heavy industrial plant amidst natural parklands and the shores of Puget Sound would be perpetuated and heightened for at least 40 more years. Because of this, West Point with its shorelines could not be added to Discovery Park, although West Point forms the natural link between the Park and Puget Sound.

2. Metro's current wastewater site would be expanded from 16 acres to 32 acres for the proposed secondary plant. This would effectively preclude future plant expansion at West Point to provide for higher levels of treatment beyond secondary, or for additional capacity.

3. High berms would block spectacular views which are now available to visitors. Additional views, which could be available were the plant abandoned and removed, would be foreclosed.

4. During the peak plant construction period there would be 576 one-way heavy diesel truck trips through residential areas of Magnolia and through the heart of Discovery Park, climbing and descending a steep hill in the Park just above the shoreline plant. The average over the five years of construction would be 220 trips per day. Noise levels of 78 to 87 dBA[1] can be expected for the truck traffic. This heavy truck traffic would occur, despite rules which forbid the general public from operating ordinary cars within the Park out of respect for the Park's natural character.

5. Noise levels from the plant during the five years of plant construction would be 80-90 dBA. This is many times louder than present noise levels, and would be especially noticeable in this Park and surrounding beaches.

6. During the five years of construction, enjoyment of the beaches and a significant areas of the Park would be significantly impacted by the din of construction and its traffic. Wildlife would be disturbed. The bald eagles would likely leave their nest during this period.

---

[1] The dBA scale is a logorithmic scale.

7. During plant operation, double-trailered diesel trucks containing sewage sludge would continue to go through Discovery Park. Sludge truck trips after construction would increase from the present 6-8 daily trips to 22-26 daily trips. The use of alternative sludge processing may reduce truck trips by an unspecified amount. But full capacity of the alternative sludge processing is not planned for until the year 2005.

XVIII

Duwamish Alternative Impacts (5D)

The Duwamish area is heavily industrialized, with the type of activities typically associated with such use. It is an area where heavy truck traffic is expected and does occur. To the passers-by, the industries within the representative site are in varied states including some with shabby appearances.

In terms of background air, a variety of odors exist, not untypical for an industrialized area. The area is currently subject to a variety of noises typical for industrialized areas, including the noise from planes using Boeing Field to the south.

There are few residences in the representative site. The nearest community is Georgetown, which is within a mile to the southeast.

1. No significant noise impacts are expected either from plant construction or operation. The trucks would travel primarily on routes designated for and already used by heavy trucks.

2. A properly designed and operated plant is unlikely to have other than very occasional odor problems. Even if odors were to occur and be vented to the outside, with the industrial odors that currently exist the wastewater plant's odors are unlikely to have a significant adverse impact.

3. A modern wastewater treatment plant with appropriate design and landscaping is likely to be an asset, improving the industrial area's appearance.

4. An additional 16 miles of large diameter wastewater pipeline would be placed by boring underground in deep tunnels below the surface. This could be constructed with minimal surface disruption.

5. More CSO control would be provided sooner than with the West Point proposal, thereby benefiting pollution control.

6. The efflulent transfer pipeline would cross the Duwamish River near Kellogg Island. Dredging or tunneling in this area can be done carefully in terms of operations, timing, worker safety, and sediment disposal, without significant harm to people, fish or wildlife. Such care is necessary because river sediments are contaminated from earlier industrial activity and may include PCBs (Polychlorinated Biphenols) and PAHs (Polycyclic Aromatic Hyrdocarbons) to a depth of about three feet.

7. An effluent tunnel would be bored through West Seattle. This tunnel is capable of being accomplished with minimum surface

disruption. The possible construction disruption at the tunnel's west exit portal, to include a few houses and possibly a small park, is well within acceptable levels for a project of this magnitude.

8. The outfall construction is unlikely to have significant adverse impacts.

9. A Duwamish wastewater treatment plant would displace an estimated 18 businesses (517 employees). The vast majority of these firms are likely to remain open by relocating.

XIX

Because this Opinion's signers differ on the social and environmental impacts of the alternatives involving Interbay, our views are set forth in separate statements.

XX

All of the outfalls associated with the proposal and non-shoreline alternatives can meet state standards if the diffuser is properly designed.

The secondary treatment effluent to be discharged into the Sound through any of the proposed outfalls is vastly superior in pollution control terms than is the primary effluent currently being discharged from the West Point plant.

For all outfall locations, the tidal currents which twice each day sweep past the outfall sites far overshadow any net northerly flow.

Regardless, continuing to use the existing West Point outfall

gives some reason for concern. The diffuser's design at West Point has probably not provided the highest possible dilution of the sewage effluent. Any assumption that the West Point outfall diffusers will have dilution characteristics equal to or better than new diffusers designed and constructed for a Duwamish plant may not be well founded.

The Duwamish outfall alignment could be improved over the location proposed by Metro by moving it into shallower water at a 300 foot depth. This would also effect a costs savings. In contrast, Metro proposed to locate the Large Duwamish outfall in a 600 foot "hole", thus subjecting it to deeper "southerly flows".

In any event, we find that the Duwamish outfall does not present significant environmental problems.

XXI

Any Conclusion of Law deemed to be a Finding of Fact is hereby adopted as such. From these Findings of Fact, the Board makes these:

CONCLUSIONS OF LAW

I

We review the consistency of the proposed development with the Shoreline Management Act and the applicable shoreline master program. RCW 90.58.140.

II

The Seattle Shoreline Master Program (SSMP) implements the Shoreline Management Act within Seattle. Non-compliance with the master program constitutes non-compliance with the Act. See,

Nisqually Delta Association v. Dupont and Weyerhaeuser Company, SHB Nos. 81-8 and 81-36 (1982).

III

There are two preliminary issues under SSMP: 1) Whether the City properly applied its phasing procedure in granting the shoreline approval?; and 2) Whether the proposal minimizes the impact on the shoreline, both as to on-site mitigation and as to moving portions of the sewage treatment plant off the shoreline?

IV

We conclude that an appropriate and sufficient level of detail is available to render a Plan Shoreline Permit decision on the feasibility of the non-shoreline alternatives, including the National Guard Interbay site. Seattle properly applied its phasing procedure.

We also conclude that matters of partial mitigation are not germane to this Plan Level Permit case. They are germane to any subsequent Project Shoreline Permit proceeding.

V

The key provision of the SSMP in this case states that:

> Expansion of existing sewage treatment plants or installation of new sewage treatment plants is prohibited in the Shoreline District unless no feasible alternative(s) to expansion or installation at such location exists. The determination as to feasibility shall be based upon [1] the goals and policies of Resolution 25173, as amended, [2] the Shoreline Management Act of 1971, as amended, and [3] full consideration of the environmental, social and economic impacts on the community. (SMC 24.60.610(A)) (brackets added for convenience of reference; emphasis added).

VI

Under the Seattle standard the question is not which is the best alternative. The locating of a treatment plant at West Point is met only when there is no feasible alternative to a shoreline sewage treatment plant. This legal standard is not a balancing test.

We conclude that Metro has not satisfied the "no feasible alternative" standard of the SSMP. Therefore, the Plan Shoreline Permit for expansion of the wastewater plant at West Point should be reversed.

VII

The term "feasible" is not specifically defined in the SSMP definitions section. It should be given its usual and ordinary meaning. Department of Revenue v. Hoppe, 82 Wn.2d 549, 552 P.2d 1094 (1973) and cases cited therein.

Websters Third New International Dictionary, (1971), defines "feasible" as "capable of being done, executed or effected: possible of realization". We conclude, therefore, that a shoreline sewage treatment plant is prohibited by the SSMP where a non-shoreline alternative is capable of being done, executed or effected, or is possible of realization with regard to the policy of the SMA, Resolution 25173, and environmental, social and economic factors.

VIII

The meaning of this "no feasible" shoreline provision is best understood by comparison with past Board decisions.

The Seattle standard is akin to that in Washington Environmental Council v. Douglas County and Department of Transportation, SHB No. 86-34 (1988). There, we reversed a shoreline permit granted by Douglas County to the State Department of Transportation for development of a highway in the shoreline of the Columbia River. In doing so, we considered alternative routes outside the shoreline. The standard employed by the Douglas County Shoreline Master Program stated that:

> "Whenever feasible and desirable, roads and railroads should be located away from shorelands . . . " (DCSMP, Section XXA, p. 25, emphasis added; WEC, supra, at p. 28)

Unlike the Douglas County provision cited above, however, the Seattle provision does not include a "desirable" element.

IX

In contrast, in Wilcox v. Yakima County and Department of Highways, SHB No. 77-28 (1978), we affirmed a shoreline permit granted by Yakima County to the State Department of Highways for development of a divided highway in the shoreline of the Yakima River. In doing so, we considered alternative routes outside the shoreline. Critical to that affirmance, however, we applied the standard employed by the Yakima County Shoreline Master Program which stated that such highways were allowed:

> " . . . when social, economic, environmental, and engineering studies indicate a shoreline location to be the most feasible . . . " (emphasis added, YCSMP Section 15.09. Wilcox, supra, p. 8).

Unlike the Yakima County provision cited above, the Seattle provision is not met by a showing that a development is the "most feasible". The Seattle standard is thus not satisfied even where a shoreline sewage treatment plant is the most feasible choice. A most feasible test is a balancing test.

X

Policy of the SMA and Resolution 25173.

We conclude that the SMA and all nine categories of the Resolution 25173's Goals and Policies are advanced by the choice of the non-shoreline Duwamish, Interbay, and the two Split Alternatives.

Resolution 25173 was adopted by the Seattle City Council on March 29, 1976. Its purpose is to adopt Goals and Policies for the SSMP consistent with the SMA. We found, pertinent to the Resolution's Goals and Policies, that the selection of the Core 5 Non-Shoreline Alternatives and the National Guard site would allow abandonment of the West Point plant. Selection of the West Point proposal, in contrast, would commit the shoreline to industrial use for at least the next 40 years. The Resolution's nine categories of Goals and Policies are labeled A) through I) as follows:

A) Shoreline Use.

The first goal is to:

Establish uses which result in long-term over short-term benefit.

The West Point proposal by its own terms is only planned for 40 years. The plant will then be obsolete. The larger space requirements of future years cannot be met at West Point as the current proposal uses all available space there. The non-shoreline alternatives are not so absolutely confined by geography. With these alternatives, all of West Point and its shorelines would be available for public access. Vistas would not be blocked, but instead would be increased.

The second goal calls for planning for and encouraging the integration and location of compatible uses within segments of the shoreline. Selection of the non-shoreline Alternatives sites would render West Point compatible with the adjacent Puget Sound shorelines and beaches to which West Point is the key gateway. Siting an industrial plant at West Point is not compatible with public use of the beaches and shorelines.

The third goal provides for uses through a system of priorities. The top priorty is "protection and enhancement of natural areas or systems", such as the natural protrusion by West Point into Puget Sound and resulting potential for uncluttered views. The very last priority within this goal is "non-water-dependent uses" which includes "sewage treatment plants". Sewage treatment plants (as distinguished from their outfalls) are non-water dependent uses. A pertinent policy with regard to these is to: "Identify all existing inappropriate uses

and formulate a relocation program using public funds when necessary and other incentives to accomplish the long term goal". A relocation program, rate relief and connection fees are such other incentives.

The fourth goal appears inapplicable in this case, calling for protection of "geologically dangerous or fragile or biologically fragile shorelines.

The fifth goal strongly favors a non-shoreline alternative by stating in the imperative:

> Locate all non-water dependent uses upland to optimize shoreline use and access.

The non-shoreline alternatives also advance the following other categories of goals in Resolution 25173 (emphasis added):

> B) Access.
>
> 1. "Provide for the optimum amount of public access - both physical and visual - to shorelines of the state."
> 2. "Preserve and enhance views of the shoreline and water from upland areas where appropriate".
>
> C) Transportation.
>
> 1. "Develop a transportation network that favors the least negative shoreline environmental impact while contributing to the functional and visual enhancement of the system."
> 2. "Relocate transportation elements that are functionally or aesthetically disruptive to the shoreline."
>
> D) Conservation.
>
> 1. "Preserve, protect and restore areas such as those necessary for the support of wild and aquatic life or those identified as having geological or biological significance."

2. Insure that all future uses will preserve and protect the environmental systems, including wild and aquatic life."

3. "Insure continuing scientific study of Seattle shoreline ecosystems."

E) Economic Development.

1. "Provide for economic activity and development of water dependent uses by planning for the creation of new developments in areas now dedicated to such use."

2. "Direct a multi-use concept of development, provided that the major use is water-dependent and which provides public access to the shoreline yet maintains the economic viability of the use."

F) Recreation.

1. "Manage publicly owned shorelines that are suitable for public recreation to optimize their potential."

2. "Increase the amount of shorelines dedicated to public recreation and open space."

3. "Identify, protect and preserve for public use and/or enjoyment those areas containing special shoreline qualities which cannot be easily duplicated."

G) Historical/Cultural.

1. "Identify, preserve, restore and protect those aspects, sites and areas of shoreline having historic or cultural significance."

H) Restoration and Enhancement.

1. "Restore those areas or conditions of shoreline now unsuitable for private or public use, consistent with economic and environmental goals." (The economic goal is water dependent use. See E), above).

2. "Upgrade and/or beautify the public shoreline."

I) Process.

1. "Provide adequate funding and a process to periodically update the inventory, goals, policies, and regulations to respond to changing attitudes and conditions."

2. "Provide a system for shoreline permit processing that is fast and decisive, eliminates unnecessary duplication of effort and jurisdiction, yet assures complete coodination and review.

3. "Emphasize shoreline planning."

XI

Economic Impacts. The economic impact of the Non-shoreline Alternatives is to add only 93¢ (Duwamish), only $1.12 (Split), and only 57¢ (Interbay) to the monthly household sewer rate of $9.41 (weighted average in 1988 dollars) above the West Point level. This would produce rate levels only about one-third of the EPA hardship standard. Rate relief and connection fees can be implemented.

We conclude that the Duwamish, Interbay, and Split (National Guard and North Dravus) Non-shoreline Alternatives are feasible with regard to economic impacts.

XII

Environmental Impacts.

The Duwamish area is heavily-industrialized and is zoned accordingly. The treatment plant, an industrial facility, is highly compatible with this area. With proper design and careful implementation, the deep tunnel to the plant, the Duwamish River

crossing, West Seattle tunnel, and the outfall, can be built without significant adverse impact for a project of this size.

We conclude that the Duwamish Non-Shoreline Alternative is feasible with regard to environmental impacts.

XIII

Social Impacts. The social impacts of locating a regional sewage treatment plant in the industrial Duwamish area are not beyond the ordinary scale for a project of this magnitude, with its year 2030 planning horizon and its vast service area. A wastewater treatment plant is compatible with this industrial surrounding.

We conclude that the Duwamish Non-Shoreline Alternative is feasible with regard to social impacts.

XIV

In summary, the Duwamish Non-shoreline Alternative sewage treatment plant site is feasible in all respects with regard to the Shoreline Management Act, (Chapt. 90.58 RCW), and the Seattle Shoreline Master Program including City Council Resolution 25173, and with full consideration of environmental, social and economic impacts.

XV

Any Finding of Fact deemed to be a Conclusion of Law is hereby adopted as such.

XVI

There being a feasible alternative to expanding the West Point sewage treatment plant in the shoreline district, the Plan Shoreline Permit granted for that expansion should be REVERSED. SMP at SMC 24.60.610(A).

DONE this 25th day of August, 1989.

SHORELINES HEARINGS BOARD

JUDITH A. BENDOR, Chair

WICK DUFFORD, Member

THOMAS R. COWAN, Member

SEPARATE STATEMENT

- BENDOR and DUFFORD -

SEPARATE STATEMENT - BENDOR AND DUFFORD

In addition to concluding that the large Duwamish Alternative is feasible, we would reverse also on the grounds of other feasible non-shoreline alternatives.

By way of background, Interbay is a level lowland area lying betwen Magnolia Bluff on the west and Queen Anne Hill on the east, and extending from Salmon Bay Waterway on the north to Elliott Bay on the south.

The Burlington Northern Railway occupies a major portion of Interbay with its Balmer classification yard, roundhouse and car shop. Some 45-50 trains arrive and depart from these extensive railway facilities daily. The facility operates day and night.

A portion of Interbay formerly served as a garbage dump. A 9-hole pitch and putt golf course now overlays the dump, with community ballfields adjacent to the north. Towards the south end of Interbay is the National Guard site.

Burlington Northern is presently unwilling to make more than 3-5 acres of its property available for sewage treatment facilities. Therefore, north of Dravus Street in that representative site in terms of currently industrially zoned land, there are 19.4 acres plus the 3-5 non-contiguous acres of Burlington Northern property. The balance of the land is zoned commercial. Absent re-zoning this commercial land, there is insufficient industrially zoned land for the 109 mgd Split Alternative. The 165 mgd large Interbay Alternative would, of course, require more space.

The commercially zoned land north of Dravus adjacent to the industrially zoned area now includes a small (14,000 square foot) QFC grocery store and a church. If this area were re-zoned to industrial, there is sufficient area for a 109 MGD Split Alternative plant.

There is also additional commercially-zoned land south of Dravus just north of the ballfields. This land would not be needed for a Split Alternative, but would be needed if a large Interbay plant were built near Dravus.

There is sufficient area for a Split Alternative plant to be located at the National Guard site, at the south end of Interbay. The Washington State National Guard appears presently unwilling to make the site available. Future availability of the site for this regional pollution facility is an open question at this stage and is not foreclosed. The Guard deems a 25 mile radius to be an appropriate distance for its relocation. Within this radius there are possible relocation sites.

An Interbay large or split plant at the garbage dump site is infeasible due to the costs and environmental impacts of excavating that site.

A large plant elsewhere at Interbay is also infeasible. Such a large plant would create disruption and displacement unacceptable in terms of environmental and social impacts. It is not possible due to technological/cost factors to reduce the area consumed by the large plant by stacking treatment plant units.

Smaller plants contemplated by two of the Split Alternatives however, could be located in the Interbay area consistent with the City's "feasibility" standard.

The Reversal Opinion three Board members have signed concluding that the Duwamish Alternative was feasible, also concludes that the Split Duwamish/Interbay Alternatives are feasible based upon the SMA, Resolution 25173 and on economic grounds. In this Separate Statement the signers are also convinced that the North Dravus Split Alternative and the National Guard Split Alternative sites are feasible on both environmental and social grounds.

North Dravus Split Alternative.

This alternative would require a 56 million gallon per day (MGD) plant in the Duwamish industrial area and 109 MGD plant at Interbay. However, at Interbay, a 73 MGD plant would provide adequate capacity for at least 30 years, until the year 2019. A 73 MGD plant would fit within the 19.4 acres of industrially zoned land north of Dravus Street. The remaining property in the representative site north of Dravus Street could be re-zoned[1] in preparation for the ultimate expansion of the plant to 109 MGD. The amount of acreage north of Dravus in the representative site appears adequate for this purpose. The commercial and community needs of Interbay could be accommodated

---

[1] We agree with the approach taken by City staff that consideration should be given to sites which could reasonably be re-zoned. See Exhibit A-168 Interrogatoary 4(a) of Second Interrogatories.

on the south side of Dravus Street. Moreover, the vast majority of other businesses displaced from the north side of Dravus would likely relocate and remain in operation.

The North Dravus Alternative (and all Interbay alternatives) would eliminiate the need for 16 miles of new tunnel under Seattle. The technology exists to control odors adequately for the location of sewage treatment plants near residential development. We do not think that truck traffic or noise during the construction phase would exceed tolerance levels for activity in this already significantly industrialized area. Further, construction at Interbay would be completed sooner than at West Point. While West Point would take five years, the Split Alternative would likely take only three.

In short, we conclude that a North Dravus Split alternative would not present environmental or social impacts exceeding the limits of feasibility.

National Guard Split Alternative.

There have been sufficient facts presented during this hearing, in the context of a shoreline Plan Permit, to reach conclusions on feasibility. This alternative would also require a 56 MGD plant at the Duwamish and a 109 MGD plant in the Interbay area where the National Guard Armory is now located, (with the same schedule for construction of ultimate capacity as North Dravus). The National Guard site has the added advantage of not displacing businesses, leaving the Dravus Street area intact. Secondly, the National Guard's

own site requirements allow for relocating within 25 miles, and are more flexible than those of a sewage treatment plant. The ultimate decision as to the National Guard site availability would rest with state and federal governments. These governments support the implementation of secondary treatment which requires these new facilities. We conclude that the National Guard site is probably available and that this Split Alternative would have a reduced social impact. Its environmental impacts would be no greater than the use of a North Dravus plant. Accordingly we conclude that a National Guard Split Alternative is feasible in all respects.

Therefore, pursuant to SMC 24.60.610(A) we would reverse the plan level shoreline permit for the expansion of the West Point plant on the grounds that the two Split Alternatives identified above are also feasible.

DONE at Lacey, WA, this 25th day of August, 1989.

SHORELINES HEARINGS BOARD

JUDITH A. BENDOR, Chair

WICK DUFFORD, Member

SEPARATE STATEMENT

- COWAN -

SEPARATE STATEMENT - COWAN

I concur with Board members Dufford and Bendor as to the feasibility of the Duwamish alternative and the consequent conclusion that this West Point Plan Level permit should be reversed. I also concur with them that the Large Interbay alternative is infeasible.

However, with regards to either of the Split alternatives involving Interbay, I conclude that these are not feasible alternatives based on lack of sufficient industrially zoned property and environmental and social grounds.

By way of background, Interbay is a level lowland lying between Magnolia and Queen Anne hills. The Interbay area is so called because it extends from the Salmon Bay Waterway on the north to Elliott Bay on the south.

The Burlington Northern Railway occupies a major portion of Interbay with its Balmer classification yard, roundhouse and car shop. Some 45-50 trains per day terminate or originate at these extensive railway facilities.

A portion of Interbay formerly served as a garbage dump. A 9-hole pitch and putt golf course now overlays the dump, with community ball fields adjacent to the north. Toward the south end of Interbay is a National Guard site.

1. There is insufficient industrially zoned property available in Interbay to accommodate the sewage treatment facilities required

under either the Large or Split alternatives.

Burlington Northern is presently unwilling to make more than 3-5 acres of its property available for sewage treatment facilities. Therefore, in the area north of Dravus Street proposed for consideration, there are only 19.4 acres of industrially zoned property plus 3-5 non-contiguous acres of Burlington Northern, also zoned industrial, for development of a plant in an industrial zone. This is not sufficient for either the 109 mgd plant of the Split alternative or the 165 mgd plant of the Interbay alternative.

Commercially zoned property adjacent to the industrial zone just described now contains the community center of the Interbay area. Stores in this area, including a QFC grocery store, serve thousands of nearby residents. The Interbay Covenant Church serves as a community center. These buildings would be demolished if the commercial property were re-zoned to industrial and taken for the sewage treatment plant.

It is not appropriate to base a siting decision on the speculation of a future re-zone.

An Interbay or Split plant occupying the present site of the National Guard Armory would depend on the availability of the site. The National Guard is unwilling to make that site available.

2. There are significant environmental impacts at Interbay. The normal light, variable wind conditions at Interbay will cause odor impacts from plant upsets that will impact nearby residential,

commercial, and recreational uses. The stigma of living in a neighborhood with even infrequent odor impacts would be serious and would be reflected in lower property values.

A sewage treatment plant would be near residences. There would be considerable construction noise and truck traffic for three to four years.

An Interbay plant at the garbage dump site is infeasible due to the costs and environmental impacts of excavating that site.

3. The social impacts of locating in the Interbay area are substantial. The nearby residential communities are actively pursuing a resurgence of commercial business and recreational activities to serve their neighborhoods. The Dravus Street corridor is uniquely located to provide convenient shopping and gathering places for the Interbay community. The siting of a sewage treatment plant at Interbay must be held to have a high social impact for both displacement of existing uses as well as for the inability to add necessary community and commercial needs in the future. A sewage treatment plant may displace up to 59 businesses and 780 employees. Under the Split alternatives, there is still a lack of necessary buffer area between the sewage treatment plant and adjacent non-industrial uses.

In summary, I conclude that the large Duwamish non-shoreline alternative site is feasible for a sewage treatment plant with regard

to the Shoreline Management Act, Seattle City Council Resolution 25173, and economic, environmental and social impacts, but the Large Interbay or Split alternatives are not feasible. Therefore, pursuant to SMC 24.60.610(A), I would reverse the plan level shoreline permit for the expansion of the West Point plant.

DONE at Lacey, WA, this 25th day of August, 1989.

SHORELINES HEARINGS BOARD

Thomas R. Cowan

THOMAS R. COWAN, Member